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35 40 45

Ala Leu Met Asp Asp Asn Gln Asn Glu Trp Gly Asp Glu Asp Leu Glu
50 55 60

Thr Lys Lys Phe Arg Phe Glu Glu Pro Val Val Leu Pro Asp Leu Asp 65 70 75 80

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Asp Ala Asp Cys Met Asp Val Asn Val Arg Gly Pro Asp Gly Phe Thr 115 120 125

Pro Leu Met Ile Ala Ser Cys Ser Gly Gly Gly Leu Glu Thr Gly Asn 130 135 140

Ser Glu Glu Glu Asp Ala Pro Ala Val Ile Ser Asp Phe Ile Tyr 145 150 155

Gln Gly Ala Ser Leu His Asn Gln Thr Asp Arg Thr Gly Glu Thr Ala

Leu His Leu Ala Ala Arg Tyr Ser Arg Ser Asp Ala Ala Lys Arg Leu 180 185 190

Leu Glu Ala Ser Ala Asp Ala Asn Ile Gln Asp Asn Met Gly Arg Thr 195 200 205

Pro Leu His Ala Ala Val Ser Ala Asp Ala Gln Gly Val Phe Gln Ile 210 220

Leu Ile Arg Asn Arg Ala Thr Asp Leu Asp Ala Arg Met His Asp Gly
225 230 235

Thr Thr Pro Leu Ile Leu Ala Ala Arg Leu Ala Val Glu Gly Met Leu 245 250 255

Glu Asp Leu Ile Asn Ser His Ala Asp Val Asn Ala Val Asp Asp Leu 260 265 270

Gly Lys Ser Ala Leu His Trp Ala Ala Val Asn Asn Val Asp Ala 275 280 285

Ala Val Val Leu Leu Lys Asn Gly Ala Asn Lys Asp Met Gln Asn Asn

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Gln Pro Leu Gly Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln 690 695 700

Glu Ser Pro Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro 705 710 715 720

Val Thr Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser 725 730 735

Ser Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His
740 745 750

Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser Ser 755 760 765

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Thr Gly Glu Ile Ile Cys Leu Thr Gly Trp Gln Gly Asp Tyr Cys 50 60

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Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln 35 40 45

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35 40 45

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50 55 60

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Thr Asp Ser Pro Asp Asp Leu Ala Thr Glu Asn Pro Glu Arg Leu Ile 130 135 . 140

Ser Arg Leu Ala Thr Gln Arg His Leu Thr Val Gly Glu Glu Trp Ser 145 150 155 160

Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser Tyr Arg 165 170 175

Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val Phe Cys 180 185 190

Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu Arg Gly 195 200 205

Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys Thr Glu Pro

Ile Cys Leu Pro Gly Cys Asp Glu Gln His Gly Phe Cys Asp Lys Pro 225 230 235

Gly Glu Cys Lys Cys Arg Val Gly Trp Gln Gly Arg Tyr Cys Asp Glu 245 250 255

Cys Ile Arg Tyr Pro Gly Cys Leu His Gly Thr Cys Gln Gln Pro Trp 260 265 270

Gln Cys Asn Cys Gln Glu Gly Trp Gly Gly Leu Phe Cys Asn Gln Asp 275 280 285

Leu Asn Tyr Cys Thr His His Lys Pro Cys Lys Asn Gly Ala Thr Cys 290 295 300

Thr Asn Thr Gly Gln Gly Ser Tyr Thr Cys Ser Cys Arg Pro Gly Tyr 305 310 315

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Cys Lys Asn Gly Gly Ser Cys Thr Asp Leu Glu Asn Ser Tyr Ser Cys 340 345 350

Thr Cys Pro Pro Gly Phe Tyr Gly Lys Ile Cys Glu Leu Ser Ala Met 355 360 365

Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly Gly Arg Cys Ser Asp Ser 370 375 380

Pro Asp Gly Gly Tyr Ser Cys Arg Cys Pro Val Gly Tyr Ser Gly Phe 385 390 395 400

Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn 405 410 415

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420 425 430

Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asp Val Asp Asp Cys Ala 435 440 445

Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp 450 455 460

Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala 465 470 475 480

Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys 485 490 495

His Glu Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Gly Tyr Gly
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Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala 515 520 525

Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro 530 535 540

Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu 545 550 555

Gly Cys Ala Ala Val Val Cys Val Arg Leu Arg Leu Gln Lys His 565 570 575

Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn 580 585 590

Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly
595 600 605

Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp 610 615 620

His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp 625 630 635

Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp 645 650 655

Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly 660 665 670

Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu 675 680

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<212> PRT

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Gln Ile His Ser Phe Gly Pro Gly Pro Gly Pro Gly Ala Pro Arg Ser

Pro Cys Ser Ala Arg Leu Pro Cys Arg Leu Phe Phe Arg Val Cys Leu 50 60

Lys Pro Gly Leu Ser Glu Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly 65 70 75 80

Ala Ala Leu Ser Ala Arg Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala 85 90 95

Pro Ala Pro Asp Leu Pro Leu Pro Asp Gly Leu Leu Gln Val Pro Phe 100 105 110

Arg Asp Ala Trp Pro Gly Thr Phe Ser Phe Ile Ile Glu Thr Trp Arg 115 120 125

Glu Glu Leu Gly Asp Gln Ile Gly Gly Pro Ala Trp Ser Leu Leu Ala 130 135 140

Arg Val Ala Gly Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg 145 150 155 160

Asp Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Tyr Arg Ala 165 170 175

Arg Cys Glu Pro Pro Ala Val Gly Thr Ala Cys Thr Arg Leu Cys Arg 180 185 190

Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala 195 200 205

Pro Leu Glu Asp Glu Cys Glu Ala Pro Leu Val Cys Arg Ala Gly Cys 210 215 220

Ser Pro Glu His Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu 225 230 235 240

Glu Gly Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser 245 250 255

Cys Leu Ser Pro Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val 260 265 270

Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser 275 280 285

Cys Ser Glu Thr Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe 290 295 300

Tyr Gly Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro 305 310 315

Cys Phe Asn Gly Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala 325 330 335

Tyr Ile Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys 340 345 350

Arg Val Asp Arg Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys 355 360 365

Leu Asp Leu Gly His Ala Leu Arg Cys Arg Cys Arg Ala Gly Phe Ala 370 375 380

Gly Pro Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys 385 390 395 400

Ala Asn Gly Gly Thr Cys Val Glu Gly Gly Gly Ala His Arg Cys Ser 405 410 415

Cys Ala Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro 420 425 430

Cys Ala Ala Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe 435 440 445

Ser Gly Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys 450 455 460

Glu Phe Pro Val His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro 465 470 475 480

Pro Gly Leu Arg Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala 485 490 495

Leu Gly Leu Leu Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu 500 505 510

Val His Val Arg Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu 515 520 525

Leu Ala Gly Thr Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu 530 535 540

Asn Asn Leu Arg Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser Ser 545 550 555

Val Asp Trp Asn Arg Pro Glu Asp Val Asp Pro Gln Gly Ile Tyr Val 565 570 575

Ile Ser Ala Pro Ser Ile Tyr Ala Arg Glu Val Ala Thr Pro Leu Phe 580 585 590

Pro Pro Leu His Thr Gly Arg Ala Gly Gln Arg Gln His Leu Leu Phe 595 600 605

Pro Tyr Pro Ser Ser Ile Leu Ser Val Lys 610 615

<210> 36

<211> 685

<212> PRT

<213> Homo sapiens

<400> 36

Met A	Ala	Ala	Ala	Ser 5	Arg	Ser	Ala	P110' Ser	73us Gly 10	seq Trp	list Ala	. ST2 Leu	25 . ti Leu	xt Leu 15	Leu
Val A	Ala	Leu	Trp 20	Gln	Gln	Arg	Ala	Ala 25	Gly	Ser	Gly	Val	Phe 30	Gln	Leu
Gln 1	Leu	Gln 35	Glu	Phe	Ile	Asn	Glu 40	Arg	Gly	Val	Leu	Ala 45	Ser	Gly	Arg
Pro (Cys 50	Glu	Pro	Gly	Cys	Arg 55	Thr	Phe	Phe	Arg	Val 60	Cys	Leu	Lys	His
Phe 65	Gln	Ala	Val	Val	Ser 70	Pro	Gly	Pro	Сув	Thr 75	Phe	Gly	Thr	Val	Ser 80
Thr	Pro	۷al	Leu	Gly 85	Thr	Asn	Ser	Phe	Ala 90	Val	Arg	Asp	Asp	Ser 95	Ser
Gly	Gly	Gly	Arg 100	Asn	Pro	Leu	Gln	Leu 105	Pro	Phe	Asn	Phe	Thr 110	Trp	Pro
Gly	Thr	Phe 115	Ser	Leu	Ile	Ile	Glu 120	Ala	Trp	His	Ala	Pro 125	Gly	Asp	Asp
Leu	Arg 130	Pro	Glu	Ala	Leu	Pro 135	Pro	Asp	Ala	Leu	Ile 140	Ser	Lys	Ile	Ala
Ile 145	Glņ	Gly	Ser	Ļeu	Ala 150	Val	Gly	Gln	Asn	Trp 155	Leu	Leu	Asp	Glu	Gln 160
Thr	Ser	Thr	Leu	Thr 165	Arg	Leu	Arg	Tyr	Ser 170	Tyr	Arg	Val	Ile	Cys 175	Ser
Asp	Asn	Tyr	Tyr 180		Asp	Asn	Сув	Ser 185	Arg	Leu	Сув	Lys	Lys 190	Arg	Asn
Asp	His	Phe 195		His	Tyr	Val	Cys 200		Pro	Asp	Gly	Asn 205	Leu	Ser	Cys
Leu	Pro 210		Trp	Thr	Gly	Glu 215		Cys	Gln	Gln	Pro 220	Ile	Cys	Leu	Ser
Gly 225	Суз	His	Gļu	Glr	Asn 230		Tyr	Cys	Ser	Lys 235	Pro	Ala	Glu	Сув	Leu 240
Сув	Arg	Pro	Gly	7 Trp 245	Gln	Gly	Arg	Leu	Сув 250	Asn	Glu	Сув	Ile	Pro 255	His
Asn	Gly	Сув	260		∃ Gly	Thr	Cys	Ser 265	Thr	Pro	Trp	Gln	Cys 270	Thr	Cys
Asp	Glu	Gl ₃ 275		Gly	y Gly	Lev	280		Asp	Glr	. Asp	Leu 285	Asn	туг	Cys
Thr	His 290		s Sei	r Pro	о Сув	295		Gly	Ala	a Thr	300	Ser	Asn	Ser	Gly
Gln 305	Arg	s Ser	г Ту	r Th	r Cys 310		c Cys	arg	Pro	315	y Tyr	Thr	Gl3	v Val	320
Cys	Glu	ı Leı	u Gli	и L ei 32		Glı	і Суя	s Asp	330	c Asr	n Pro	су Сув	a Arg	335	Gly
Gly	Sei	с Су	s Ly:		p Glr	ı Glı	ı Ası	Gl ₃ 345		r His	в Сув	s Lev	1 Cys 350	Pro	Pro
Gly	Ту	r Ty 35		y Le	u His	з Суя	s Gl: 360		s Sei	r Thi	r Leu	369	Cys	s Ala	a Asp
Ser	Pro	э Су	s Ph	e As	n Gl	y Gl	y Se:	r Cy	s Ar	g Gl	ı Arg	g Ası	n Gli	n Gly	y Ala

Asn Tyr Ala Cys Glu Cys Pro Pro Asn Phe Thr Gly Ser Asn Cys Glu 390 395

375

Lys Lys Val Asp Arg Cys Thr Ser Asn Pro Cys Ala Asn Gly Gln 410

Cys Leu Asn Arg Gly Pro Ser Arg Met Cys Arg Cys Arg Pro Gly Phe 425

Thr Gly Thr Tyr Cys Glu Leu His Val Ser Asp Cys Ala Arg Asn Pro

Cys Ala His Gly Gly Thr Cys His Asp Leu Glu Asn Gly Leu Met Cys 455

Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg Cys Glu Val Arg Thr Ser

Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe Asn Arg Ala Thr Cys Tyr

Thr Asp Leu Ser Thr Asp Thr Phe Val Cys Asn Cys Pro Tyr Gly Phe 505

Val Gly Ser Arg Cys Glu Phe Pro Val Gly Leu Pro Pro Ser Phe Pro 520

Trp Val Ala Val Ser Leu Gly Val Gly Leu Ala Val Leu Leu Val Leu

Leu Gly Met Val Ala Val Ala Val Arg Gln Leu Arg Leu Arg Arg Pro

Asp Asp Gly Ser Arg Glu Ala Met Asn Asn Leu Ser Asp Phe Gln Lys

Asp Asn Leu Ile Pro Ala Ala Gln Leu Lys Asn Thr Asn Gln Lys Lys

Glu Leu Glu Val Asp Cys Gly Leu Asp Lys Ser Asn Cys Gly Lys Gln

Gln Asn His Thr Leu Asp Tyr Asn Leu Ala Pro Gly Pro Leu Gly Arg

Gly Thr Met Pro Gly Lys Phe Pro His Ser Asp Lys Ser Leu Gly Glu

Lys Ala Pro Leu Arg Leu His Ser Glu Lys Pro Glu Cys Arg Ile Ser 650

Ala Ile Cys Ser Pro Arg Asp Ser Met Tyr Gln Ser Val Cys Leu Ile 665

Ser Glu Glu Arg Asn Glu Cys Val Ile Ala Thr Glu Val 680

<210> 37

<211> 1218

<212> PRT

Homo sapiens

<400> 37

Met Arg Ser Pro Arg Thr Arg Gly Arg Ser Gly Arg Pro Leu Ser Leu Leu Leu Ala Leu Leu Cys Ala Leu Arg Ala Lys Val Cys Gly Ala Ser Gly Gln Phe Glu Leu Glu Ile Leu Ser Met Gln Asn Val Asn Gly Glu Leu Gln Asn Gly Asn Cys Cys Gly Gly Ala Arg Asn Pro Gly Asp Arg Lys Cys Thr Arg Asp Glu Cys Asp Thr Tyr Phe Lys Val Cys Leu Lys Glu Tyr Gln Ser Arg Val Thr Ala Gly Gly Pro Cys Ser Phe Gly Ser Gly Ser Thr Pro Val Ile Gly Gly Asn Thr Phe Asn Leu Lys Ala Ser Arg Gly Asn Asp Arg Asn Arg Ile Val Leu Pro Phe Ser Phe Ala Trp 120 Pro Arg Ser Tyr Thr Leu Leu Val Glu Ala Trp Asp Ser Ser Asn Asp Thr Val Gln Pro Asp Ser Ile Ile Glu Lys Ala Ser His Ser Gly Met Ile Asn Pro Ser Arg Gln Trp Gln Thr Leu Lys Gln Asn Thr Gly Val Ala His Phe Glu Tyr Gln Ile Arg Val Thr Cys Asp Asp Tyr Tyr Tyr 185 Gly Phe Gly Cys Asn Lys Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln Asn Gly Asn Lys Thr Cys Met Glu Gly Trp 215 Met Gly Pro Glu Cys Asn Arg Ala Ile Cys Arg Gln Gly Cys Ser Pro 230 Lys His Gly Ser Cys Lys Leu Pro Gly Asp Cys Arg Cys Gln Tyr Gly 250 Trp Gln Gly Leu Tyr Cys Asp Lys Cys Ile Pro His Pro Gly Cys Val His Gly Ile Cys Asn Glu Pro Trp Gln Cys Leu Cys Glu Thr Asn Trp Gly Gly Gln Leu Cys Asp Lys Asp Leu Asn Tyr Cys Gly Thr His Gln Pro Cys Leu Asn Gly Gly Thr Cys Ser Asn Thr Gly Pro Asp Lys Tyr Gln Cys Ser Cys Pro Glu Gly Tyr Ser Gly Pro Asn Cys Glu Ile Ala Glu His Ala Cys Leu Ser Asp Pro Cys His Asn Arg Gly Ser Cys Lys Glu Thr Ser Leu Gly Phe Glu Cys Glu Cys Ser Pro Gly Trp Thr Gly

Pro	Thr	Cys	Ser	Thr	Asn	Ile	Asp	Asp	Cys	Ser	Pro	Asn	Asn	Cys	Ser
	370	-				375					380				

His Gly Gly Thr Cys Gln Asp Leu Val Asn Gly Phe Lys Cys Val Cys 385 390 395 400

Pro Pro Gln Trp Thr Gly Lys Thr Cys Gln Leu Asp Ala Asn Glu Cys 405 410 415

Glu Ala Lys Pro Cys Val Asn Ala Lys Ser Cys Lys Asn Leu Ile Ala 420 425 430

Ser Tyr Tyr Cys Asp Cys Leu Pro Gly Trp Met Gly Gln Asn Cys Asp
435
440
445

Ile Asn Ile Asn Asp Cys Leu Gly Gln Cys Gln Asn Asp Ala Ser Cys
450 460

Arg Asp Leu Val Asn Gly Tyr Arg Cys Ile Cys Pro Pro Gly Tyr Ala
465 470 475 480

Gly Asp His Cys Glu Arg Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys 485 490 495

Leu Asn Gly Gly His Cys Gln Asn Glu Ile Asn Arg Phe Gln Cys Leu
500 510

Cys Pro Thr Gly Phe Ser Gly Asn Leu Cys Gln Leu Asp Ile Asp Tyr 515 520 525

Cys Glu Pro Asn Pro Cys Gln Asn Gly Ala Gln Cys Tyr Asn Arg Ala 530 535 540

Ser Asp Tyr Phe Cys Lys Cys Pro Glu Asp Tyr Glu Gly Lys Asn Cys 545 550 555

Ser His Leu Lys Asp His Cys Arg Thr Thr Pro Cys Glu Val Ile Asp 565 570 575

Ser Cys Thr Val Ala Met Ala Ser Asn Asp Thr Pro Glu Gly Val Arg 580 585 590

Tyr Ile Ser Ser Asn Val Cys Gly Pro His Gly Lys Cys Lys Ser Gln 595 600

Ser Gly Gly Lys Phe Thr Cys Asp Cys Asn Lys Gly Phe Thr Gly Thr
610 620

Tyr Cys His Glu Asn Ile Asn Asp Cys Glu Ser Asn Pro Cys Arg Asn 625 630 635

Gly Gly Thr Cys Ile Asp Gly Val Asn Ser Tyr Lys Cys Ile Cys Ser 645 650 655

Asp Gly Trp Glu Gly Ala Tyr Cys Glu Thr Asn Ile Asn Asp Cys Ser 660 665 670

Gln Asn Pro Cys His Asn Gly Gly Thr Cys Arg Asp Leu Val Asn Asp 675 680 685

Phe Tyr Cys Asp Cys Lys Asn Gly Trp Lys Gly Lys Thr Cys His Ser 690 695 700

Arg Asp Ser Gln Cys Asp Glu Ala Thr Cys Asn Asn Gly Gly Thr Cys 705 710 715 720

Tyr Asp Glu Gly Asp Ala Phe Lys Cys Met Cys Pro Gly Gly Trp Glu
725 730 735

Gly Thr Thr Cys Asn Ile Ala Arg Asn Ser Ser Cys Leu Pro Asn Pro

Cys His Asn Gly Gly Thr Cys Val Val Asn Gly Glu Ser Phe Thr Cys 755 760 765

Val Cys Lys Glu Gly Trp Glu Gly Pro Ile Cys Ala Gln Asn Thr Asn 770 775 780

Asp Cys Ser Pro His Pro Cys Tyr Asn Ser Gly Thr Cys Val Asp Gly
785 790 795 800

Asp Asn Trp Tyr Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp 805 810 815

Cys Arg Ile Asn Ile Asn Glu Cys Gln Ser Ser Pro Cys Ala Phe Gly 820 825 830

Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Val Cys Pro Pro 835 840 845

Gly His Ser Gly Ala Lys Cys Gln Glu Val Ser Gly Arg Pro Cys Ile 850 860

Thr Met Gly Ser Val Ile Pro Asp Gly Ala Lys Trp Asp Asp Asp Cys 865 870 875

Asn Thr Cys Gln Cys Leu Asn Gly Arg Ile Ala Cys Ser Lys Val Trp 885 890 895

Cys Gly Pro Arg Pro Cys Leu Leu His Lys Gly His Ser Glu Cys Pro 900 905 910

Ser Gly Gln Ser Cys Ile Pro Ile Leu Asp Asp Gln Cys Phe Val His 915 920 925

Pro Cys Thr Gly Val Gly Glu Cys Arg Ser Ser Ser Leu Gln Pro Val 930 935 940

Lys Thr Lys Cys Thr Ser Asp Ser Tyr Tyr Gln Asp Asn Cys Ala Asn 945 950 955 960

Ile Thr Phe Thr Phe Asn Lys Glu Met Met Ser Pro Gly Leu Thr Thr 965 970 975

Glu His Ile Cys Ser Glu Leu Arg Asn Leu Asn Ile Leu Lys Asn Val 980 985 990

Ser Ala Glu Tyr Ser Ile Tyr Ile Ala Cys Glu Pro Ser Pro Ser Ala 995 1000 1005

Asn Asn Glu Ile His Val Ala Ile Ser Ala Glu Asp Ile Arg Asp 1010 1015 1020

Asp Gly Asn Pro Ile Lys Glu Ile Thr Asp Lys Ile Ile Asp Leu 1025 1030 1035

Val Ser Lys Arg Asp Gly Asn Ser Ser Leu Ile Ala Ala Val Ala 1040 1045 1050

Glu Val Arg Val Gln Arg Arg Pro Leu Lys Asn Arg Thr Asp Phe 1055 1060 1065

Leu Val Pro Leu Leu Ser Ser Val Leu Thr Val Ala Trp Ile Cys 1070 1075 1080

Cys Leu Val Thr Ala Phe Tyr Trp Cys Leu Arg Lys Arg Arg Lys 1085 1090 1095

Pro Gly Ser His Thr His Ser Ala Ser Glu Asp Asn Thr Thr Asn 1100 1105 1110

- Asn Val Arg Glu Gln Leu Asn Gln Ile Lys Asn Pro Ile Glu Lys 1115 1120 1125
- His Gly Ala Asn Thr Val Pro Ile Lys Asp Tyr Glu Asn Lys Asn 1130 1135 1140
- Ser Lys Met Ser Lys Ile Arg Thr His Asn Ser Glu Val Glu Glu 1145 1150 1155
- Asp Asp Met Asp Lys His Gln Gln Lys Ala Arg Phe Ala Lys Gln 1160 1165 1170
- Pro Ala Tyr Thr Leu Val Asp Arg Glu Glu Lys Pro Pro Asn Gly 1175 1180 1185
- Thr Pro Thr Lys His Pro Asn Trp Thr Asn Lys Gln Asp Asn Arg
- Asp Leu Glu Ser Ala Gln Ser Leu Asn Arg Met Glu Tyr Ile Val 1205 1210 1215
- <210> 38
- <211> 1238
- <212> PRT
- <213> Homo sapiens

<400> 38

- Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu 1 10 15
- Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu 20 25 30
- Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala 35 40 45
- Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His
- Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala 65 70 75 80
- Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro 85 90 95
- Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly
- Asp Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly
- Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu 130 135 140
- Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu 145 150 155 160
- Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp 165 170 175
- Arg Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu 180 185 190

Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly 365

Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu 370

Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys

Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val

395

Gly Ala Thr Cys Gln Leu Asp Ala Asn Glu Cys Glu Gly Lys Pro Cys

Leu Asn Ala Phe Ser Cys Lys Asn Leu Ile Gly Gly Tyr Tyr Cys Asp 435 440 445

Cys Ile Pro Gly Trp Lys Gly Ile Asn Cys His Ile Asn Val Asn Asp 450 455 460

Cys Arg Gly Gln Cys Gln His Gly Gly Thr Cys Lys Asp Leu Val Asn 465 470 475 480

Gly Tyr Gln Cys Val Cys Pro Arg Gly Phe Gly Gly Arg His Cys Glu 485 490 495

Leu Glu Arg Asp Lys Cys Ala Ser Ser Pro Cys His Ser Gly Gly Leu 500 505 510

Cys Glu Asp Leu Ala Asp Gly Phe His Cys His Cys Pro Gln Gly Phe
515 520 525

Ser Gly Pro Leu Cys Glu Val Asp Val Asp Leu Cys Glu Pro Ser Pro 530 540

Cys Arg Asn Gly Ala Arg Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys 545 550 555

Ala Cys Pro Asp Asp Phe Gly Gly Lys Asn Cys Ser Val Pro Arg Glu

Pro Cys Pro Gly Gly Ala Cys Arg Val Ile Asp Gly Cys Gly Ser Asp Ala Gly Pro Gly Met Pro Gly Thr Ala Ala Ser Gly Val Cys Gly Pro His Gly Arg Cys Val Ser Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys 615 Asp Ser Gly Phe Thr Gly Thr Tyr Cys His Glu Asn Ile Asp Asp Cys 630 635 Leu Gly Gln Pro Cys Arg Asn Gly Gly Thr Cys Ile Asp Glu Val Asp Ala Phe Arg Cys Phe Cys Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp 665 Thr Asn Pro Asn Asp Cys Leu Pro Asp Pro Cys His Ser Arg Gly Arg 680 Cys Tyr Asp Leu Val Asn Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp Lys Gly Lys Thr Cys His Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr Cys Ser Asn Gly Gly Thr Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys 730 Ala Cys Pro Pro Gly Trp Lys Gly Ser Thr Cys Ala Val Ala Lys Asn 745 Ser Ser Cys Leu Pro Asn Pro Cys Val Asn Gly Gly Thr Cys Val Gly Ser Gly Ala Ser Phe Ser Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg Thr Cys Thr His Asn Thr Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn 790 Gly Gly Ile Cys Val Asp Gly Val Asn Trp Phe Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln 825 Ser Ser Pro Cys Ala Tyr Gly Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Ser Cys Pro Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu 855 Val Ile Gly Phe Gly Arg Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro His Gly Ser Ser Trp Val Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp 890 Gly Arg Arg Asp Cys Ser Lys Val Trp Cys Gly Trp Lys Pro Cys Leu Leu Ala Gly Gln Pro Glu Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln 920

Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu

935

940

- Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu 945 950 955 960
- Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His 965 970 975
- Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys 980 985 990
- Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg 995 1000 1005
- Leu Leu Val Leu Cys Asp Arg Ala Ser Ser Gly Ala Ser Ala 1010 1015 1020
- Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp 1025 1030 1035
- Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile 1040 1045 1050
- Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val 1055 1060 1065
- Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu 1070 1075 1080
- Val Pro Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys 1085 1090 1095
- Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg 1100 1105 1110
- Glu Arg Ser Arg Leu Pro Arg Glu Glu Ser Ala Asn Asn Gln Trp 1115 1120 1125
- Ala Pro Leu Asn Pro Ile Arg Asn Pro Ile Glu Arg Pro Gly Gly 1130 1135 1140
- His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro 1145 1150 1155
- Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala 1160 1165 1170
- Val Arg Glu Asp Glu Glu Asp Glu Asp Leu Gly Arg Gly Glu Glu 1175 1180 1185
- Asp Ser Leu Glu Ala Glu Lys Phe Leu Ser His Lys Phe Thr Lys 1190 1195 1200
- Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly
 1205 1216
- Pro Lys Val Asp Asn Arg Ala Val Arg Ser Ile Asn Glu Ala Arg 1220 1225 1230
- Tyr Ala Gly Lys Glu 1235
- <210> 39
- <211> 2556
- <212> PRT
- <213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (891)..(891)

<223> X is any amino acid

<400> 39

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Leu Ala Ala Arg Gly Pro Arg Cys Ser Gln Pro Gly Glu Thr Cys Leu 20 25 30

Asn Gly Gly Lys Cys Glu Ala Ala Asn Gly Thr Glu Ala Cys Val Cys
35 40 45

Gly Gly Ala Phe Val Gly Pro Arg Cys Gln Asp Pro Asn Pro Cys Leu
50 60

Ser Thr Pro Cys Lys Asn Ala Gly Thr Cys His Val Val Asp Arg Arg 65 70 75 80

Gly Val Ala Asp Tyr Ala Cys Ser Cys Ala Leu Gly Phe Ser Gly Pro 85 90 95

Leu Cys Leu Thr Pro Leu Asp Asn Ala Cys Leu Thr Asn Pro Cys Arg
100 105 110

Asn Gly Gly Thr Cys Asp Leu Leu Thr Leu Thr Glu Tyr Lys Cys Arg 115 120 125

Cys Pro Pro Gly Trp Ser Gly Lys Ser Cys Gln Gln Ala Asp Pro Cys 130 135 140

Ala Ser Asn Pro Cys Ala Asn Gly Gly Gln Cys Leu Pro Phe Glu Ala 145 150 155 160

Ser Tyr Ile Cys His Cys Pro Pro Ser Phe His Gly Pro Thr Cys Arg 165 170 175

Gln Asp Val Asn Glu Cys Gly Gln Lys Pro Arg Leu Cys Arg His Gly 180 185 190

Gly Thr Cys His Asn Glu Val Gly Ser Tyr Arg Cys Val Cys Arg Ala 195 200 205

Thr His Thr Gly Pro Asn Cys Glu Arg Pro Tyr Val Pro Cys Ser Pro 210 215 220

Ser Pro Cys Gln Asn Gly Gly Thr Cys Arg Pro Thr Gly Asp Val Thr 225 230 235 240

His Glu Cys Ala Cys Leu Pro Gly Phe Thr Gly Gln Asn Cys Glu Glu
245 250 255

Asn Ile Asp Asp Cys Pro Gly Asn Asn Cys Lys Asn Gly Gly Ala Cys 260 265 270

Val Asp Gly Val Asn Thr Tyr Asn Cys Pro Cys Pro Pro Glu Trp Thr 275 280 285

Gly Gln Tyr Cys Thr Glu Asp Val Asp Glu Cys Gln Leu Met Pro Asn 290 295 300

Ala	Cys	Gln	Asn	Gly	Gly	Thr	Cys	His	Asn	Thr	His	Gly	Gly	Tyr	Asn
305	•			-	310					315					320

Cys Val Cys Val Asn Gly Trp Thr Gly Glu Asp Cys Ser Glu Asn Ile 325 330 335

Asp Asp Cys Ala Ser Ala Ala Cys Phe His Gly Ala Thr Cys His Asp 340 345 350

Arg Val Ala Ser Phe Tyr Cys Glu Cys Pro His Gly Arg Thr Gly Leu 355 360 365

Leu Cys His Leu Asn Asp Ala Cys Ile Ser Asn Pro Cys Asn Glu Gly 370 380

Ser Asn Cys Asp Thr Asn Pro Val Asn Gly Lys Ala Ile Cys Thr Cys 385 390 395

Pro Ser Gly Tyr Thr Gly Pro Ala Cys Ser Gln Asp Val Asp Glu Cys
405 410 415

Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn Thr 420 425 430

Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro Arg 435 440 445

Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn Asp 450 455 460

Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met Pro 465 470 475 480

Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr Asp Glu Cys Ala Ser 485 490 495

Ser Pro Cys Leu His Asn Gly Arg Cys Leu Asp Lys Ile Asn Glu Phe 500 505

Gln Cys Glu Cys Pro Thr Gly Phe Thr Gly His Leu Cys Gln Tyr Asp 515 520 525

Val Asp Glu Cys Ala Ser Thr Pro Cys Lys Asn Gly Ala Lys Cys Leu 530 540

Asp Gly Pro Asn Thr Tyr Thr Cys Val Cys Thr Glu Gly Tyr Thr Gly 545 550 555 560

Thr His Cys Glu Val Asp Ile Asp Glu Cys Asp Pro Asp Pro Cys His 565 570 575

Tyr Gly Ser Cys Lys Asp Gly Val Ala Thr Phe Thr Cys Leu Cys Arg 580 585 590

Pro Gly Tyr Thr Gly His His Cys Glu Thr Asn Ile Asn Glu Cys Ser 595 600 605

Ser Gln Pro Cys Arg Leu Arg Gly Thr Cys Gln Asp Pro Asp Asn Ala 610 620

Tyr Leu Cys Phe Cys Leu Lys Gly Thr Thr Gly Pro Asn Cys Glu Ile 625 630 635 640

Asn Leu Asp Asp Cys Ala Ser Ser Pro Cys Asp Ser Gly Thr Cys Leu 645 650 655

Asp Lys Ile Asp Gly Tyr Glu Cys Ala Cys Glu Pro Gly Tyr Thr Gly 660 665 670

Ser Met Cys Asn Ser Asn Ile Asp Glu Cys Ala Gly Asn Pro Cys His

Asn Gly Gly Thr Cys Glu Asp Gly Ile Asn Gly Phe Thr Cys Arg Cys 690 695 700

Pro Glu Gly Tyr His Asp Pro Thr Cys Leu Ser Glu Val Asn Glu Cys
705 710 715 720

Asn Ser Asn Pro Cys Val His Gly Ala Cys Arg Asp Ser Leu Asn Gly 725 730 735

Tyr Lys Cys Asp Cys Asp Pro Gly Trp Ser Gly Thr Asn Cys Asp Ile
740 745 750

Asn Asn Asn Glu Cys Glu Ser Asn Pro Cys Val Asn Gly Gly Thr Cys 755 760 765

Lys Asp Met Thr Ser Gly Ile Val Cys Thr Cys Arg Glu Gly Phe Ser 770 780

Gly Pro Asn Cys Gln Thr Asn Ile Asn Glu Cys Ala Ser Asn Pro Cys 785 790 795 800

Leu Asn Lys Gly Thr Cys Ile Asp Asp Val Ala Gly Tyr Lys Cys Asn 805 810 810

Cys Leu Leu Pro Tyr Thr Gly Ala Thr Cys Glu Val Val Leu Ala Pro 820 825 830

Cys Ala Pro Ser Pro Cys Arg Asn Gly Gly Glu Cys Arg Gln Ser Glu 835 840 845

Asp Tyr Glu Ser Phe Ser Cys Val Cys Pro Thr Ala Gly Ala Lys Gly 850 855 860

Gln Thr Cys Glu Val Asp Ile Asn Glu Cys Val Leu Ser Pro Cys Arg 865 870 875

His Gly Ala Ser Cys Gln Asn Thr His Gly Xaa Tyr Arg Cys His Cys 885 890 895

Gln Ala Gly Tyr Ser Gly Arg Asn Cys Glu Thr Asp Ile Asp Asp Cys 900 905 910

Arg Pro Asn Pro Cys His Asn Gly Gly Ser Cys Thr Asp Gly Ile Asn 915 920 925

Thr Ala Phe Cys Asp Cys Leu Pro Gly Phe Arg Gly Thr Phe Cys Glu 930 935 940

Glu Asp Ile Asn Glu Cys Ala Ser Asp Pro Cys Arg Asn Gly Ala Asn 945 950 955 960

Cys Thr Asp Cys Val Asp Ser Tyr Thr Cys Thr Cys Pro Ala Gly Phe 965 970 975

Ser Gly Ile His Cys Glu Asn Asn Thr Pro Asp Cys Thr Glu Ser Ser 980 985 990

Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser Phe Thr Cys 995 1000 1005

Leu Cys Pro Pro Gly Phe Thr Gly Ser Tyr Cys Gln His Val Val

Asn Glu Cys Asp Ser Arg Pro Cys Leu Leu Gly Gly Thr Cys Gln 1025 1030 1035

Asp Gly Arg Gly Leu His Arg Cys Thr Cys Pro Gln Gly Tyr Thr 1040 1045 1050

				•						~				
Gly	Pro 1055	Asn	Суз	Gln	Asn	Leu 1060	Val	His	Trp	Cys	Asp 1065	Ser	Ser	Pro
Cys	Lys 1070	Asn	Gly	Gly	Lys	Cys 1075	Trp	Gln	Thr	His	Thr 1080	Gln	Tyr	Arg
Cys	Glu 1085	Cys	Pro	Ser	Gly	Trp 1090	Thr	Gly	Leu	Tyr	Cys 1095	Asp	Val	Pro
Ser	Val 1100	Ser	Cys	Glu	Val	Ala 1105	Ala	Gln	Arg	Gln	Gly 1110	Val	Asp	Val
Ala	Arg 1115	Leu	Cys	Gln	His	Gly 1120	Gly	Leu	Сув	Val	Asp 1125	Ala	Gly	Asn
Thr	His 1130	His	Cys	Arg	Cys	Gln 1135	Ala	Gly	Tyr	Thr	Gly 1140	Ser	Tyr	Сув
Glu	Asp 1145	Leu	Val	Asp	Glu	Cys 1150	Ser	Pro	Ser	Pro	Cys 1155	Gln	Asn	Gly
Ala	Thr 1160	Cys	Thr	Asp	Tyr	Leu 1165	Gly	Gly	Tyr	Ser	Cys 1170	Lys	Cys	Val
Ala	Gly 1175	Tyr	His	Gly	Val	Asn 1180	Cys	Ser	Glu	Glu	Ile 1185	Asp	Glu	Сув
Leu	Ser 1190	His	Pro	Cys	Gln	Asn 1195	Gly	Gly	Thr	Cys	Leu 1200	Asp	Leu	Pro
Asn	Thr 1205	Tyr	Lys	CÀa	Ser	Cys 1210	Pro	Arg	Gly	Thr	Gln 1215	Gly	Val	His
Cys	Glu 1220		Asn	Val	Asp	Asp 1225		Asn	Pro	Pro	Val 1230	Asp	Pro	Val
Ser	Arg 1235	Ser	Pro	Lys	Сув	Phe 1240	Asn	Asn	Gly	Thr	Cys 1245	Val	Asp	Gln
Val	Gly 1250		Tyr	Ser	Cys	Thr 1255		Pro	Pro	Gly	Phe 1260		Gly	Glu
Arg	Cys 1265		Gly	Asp	Val	Asn 1270	Glu	Cys	Leu	Ser	Asn 1275		Суз	Asp
Ala	Arg 1280		Thr	Gln	Asn	Сув 1285		Gln	Arg	Val	Asn 1290		Phe	His
Cys	Glu 1295		Arg	Ala	Gly	His 1300		Gly	Arg	Arg	Cys 1305		Ser	Val
Ile	Asn 1310		Cys	Lys	Gly	Lys 1315		Суз	Lys	Asn	Gly 1320		Thr	Cys
Ala	Val 1325		Ser	Asn	Thr	Ala 1330	_	Gly	Phe	Ile	Cys 1335		Cys	Pro
Ala	Gly 1340		Glu	Gly	Ala	Thr 1345	-	Glu	Asn	Asp	Ala 1350	_	Thr	Cys
Gly	Ser 1355		Arg	Сув	Leu	Asn 1360		Gly	Thr	Сув	Ile 1365		Gly	Pro
Arg	Ser 1370		Thr	Cys	Leu	Cys 1375		Gly	Pro	Phe	Thr 1380		Pro	Glu
Сув	Gln 1385		Pro	Ala	Ser	Ser 1390		Сув	Leu	Gly	Gly 1395		Pro	Сув

P11073us	202	1 i e+	CT25	+~+
PI LU / 3118	sea	IISt.	. 5125	. LXL

Tvr	Asn	Gln	Glv	Thr	Cvs	Glu					ist.S Ser			Tyr
_	1400					1405					1410			
Arg	Cys 1415	Leu	Cys	Pro	Ala	Lys 1420	Phe	Asn	Gly	Leu	Leu 1425	Cys	His	He
Leu	Asp 1430	Tyr	Ser	Phe	Gly	Gly 1435	Gly	Ala	Gly	Arg	Asp 1440	Ile	Pro	Pro
Pro	Leu 1445	Ile	Glu	Glu	Ala	Cys 1450	Glu	Leu	Pro	Glu	Cys 1455	Gln	Glu	Asp
Ala	Gly 1460	Asn	Lys	Val	Cys	Ser 1465	Leu	Gln	Cys	Asn	Asn 1470	His	Ala	Cys
Gly	Trp 1475		Gly	Gly	Asp	Cys 1480	Ser	Leu	Asn	Phe	Asn 1485	Asp	Pro	Trp
Lys	Asn 1490		Thr	Gln	Ser	Leu 1495	Gln	Cys	Trp	Lys	Tyr 1500	Phe	Ser	Asp
Gly	His 1505		Asp	Ser	Gln	Cys 1510	Asn	Ser	Ala	Gly	Cys 1515	Leu	Phe	Asp
Gly	Phe 1520		Сув	Gln	Arg	Ala 1525	Glu	Gly	Gln	Cys	Asn 1530	Pro	Leu	Tyr
Asp	Gln 1535		Cys	Lys	Asp	His 1540		Ser	Asp	Gly	His 1545		Asp	Gln
Gly	Cys 1550		Ser	Ala	Glu	Cys 1555		Trp	Asp	Gly	Leu 1560	Asp	Cys	Ala
Glu	His 1565		Pro	Glu	Arg	Leu 1570		Ala	Gly	Thr	Leu 1575	Val	Val	Val
Val	Leu 1580		Pro	Pro	Glu	Gln 1585		Arg	Asn	Ser	Ser 1590		His	Phe
Leu	Arg 1595		Leu	Ser	Arg	Val 1600		His	Thr	Asn	Val 1605		Phe	Lys
Arg	Asp 1610		His	Gly	Gln	Gln 1615		Ile	Phe	Pro	Tyr 1620		Gly	Arg
Glu	Glu 1625		Leu	Arg	Lys	His 1630		Ile	Lys	Arg	Ala 1635		Glu	Gly
Trp	Ala 1640		Pro	Asp	Ala	Leu 1645		Gly	Gln	Val	Lys 1650		Ser	Leu
Leu	Pro 1655		Gly	Ser	Glu	Gly 1660		Arg	Arg	Arg	Arg 1665		Leu	Asp
Pro	Met 1670		Val	Arg	Gly	Ser 1675		Val	Tyr	Leu	Glu 1680		Asp	Asn
Arg	Gln 1685	-	Val	Gln	Ala	Ser 1690		Gln	Cys	Phe	Gln 1695		Ala	Thr
Asp	Val 1700		Ala	Phe	Leu	Gly 1705		Leu	Ala	Ser	Leu 1710		Ser	Leu
Asn	11e 1715		туг	Lys	Ile	Glu 1720		Val	. Gln	Ser	Glu 1725		Val	Glu
Pro	Pro 1730		Pro	Ala	Glr	Leu 1735		Phe	Met	Туг	Val 1740		Ala	Ala
Ala	Phe	Val	Leu	ı Lev	Phe	Phe	Val	. Gly	Cys		Val		Leu	Ser

•	1745					1/50					1/55			
Arg	Lys 1760	Arg	Arg	Arg	Gln	His 1765	Gly	Gln	Leu	Trp	Phe 1770	Pro	Glu	Gly
Phe	Lys 1775	Val	Ser	Glu	Ala	Ser 1780	Lys	Lys	Lys	Arg	Arg 1785	Glu	Pro	Leu
Gly	Glu 1790	Asp	Ser	Val	Gly	Leu 1795	Lys	Pro	Leu	Lys	Asn 1800	Ala	Ser	Asp
Gly	Ala 1805	Leu	Met	Asp	Asp	Asn 1810	Gln	Asn	Glu	Trp	Gly 1815	Asp	Glu	Asp
Leu	Glu 1820		Lys	Lys	Phe	Arg 1825	Phe	Glu	Glu	Pro	Val 1830	Val	Leu	Pro
Asp	Leu 1835	Asp	Asp	Gln	Thr	Asp 1840	His	Arg	Gln	Trp	Thr 1845	Gln	Gln	His
Leu	Asp 1850	Ala	Ala	Asp	Leu	Arg 1855	Met	Ser	Ala	Met	Ala 1860	Pro	Thr	Pro
Pro	Gln 1865	Gly	Glu	Val	Asp	Ala 1870	Asp	Суз	Met	Asp	Val 1875	Asn	Val	Arg
Gly	Pro 1880	Asp	Gly	Phe	Thr	Pro 1885	Leu	Met	Ile	Ala	Ser 1890	Cys	Ser	Gly
Gly	Gly 1895	Leu	Glu	Thr	Gly	Asn 1900	Ser	Glu	Gļu	Glu	Glu 1905	Asp	Ala	Pro
Ala	Val 1910	Ile	Ser	Asp	Phe	Ile 1915		Gln	Gly	Ala	Ser 1920	Leu	His	Asn
Gln	Thr 1925	Asp	Arg	Thr	Gly	Glu 1930	Thr	Ala	Leu	His	Leu 1935	Ala	Ala	Arg
Tyr	Ser 1940	Arg	Ser	Asp	Ala	Ala 1945	Lys	Arg	Leu	Leu	Glu 1950	Ala	Ser	Ala
Asp	Ala 1955	Asn	Ile	Gln	Asp	Asn 1960	Met	Gly	Arg	Thr	Pro 1965	Leu	His	Ala
Ala	Val 1970		Ala	Asp	Ala	Gln 1975	Gly	Val	Phe	Gln	Ile 1980	Leu	Ile	Arg
Asn	Arg 1985	Ala	Thr	Asp	Leu	Asp 1990	Ala	Arg	Met	His	Asp 1995	Gly	Thr	Thr
Pro	Leu 2000	Ile	Leu	Ala	Ala	Arg 2005	Leu	Ala	Val	Glu	Gly 2010	Met	Leu	Glu
Asp	Leu 2015	Ile	Asn	Ser	His	Ala 2020	Asp	Val	Asn	Ala	Val 2025	Asp	Asp	Leu
Gly	Lys 2030	Ser	Ala	Leu	His	Trp 2035	Ala	Ala	Ala	Val	Asn 2040	Asn	Val	Asp
Ala	Ala 2045	Val	Val	Leu	Leu	Lys 2050	Asn	Gly	Ala	Asn	Lys 2055	Asp	Met	Gln
Asn	Asn 2060	Arg	Glu	Glu	Thr	Pro 2065	Leu	Phe	Leu	Ala	Ala 2070	Arg	Glu	Gly
Ser	Tyr 2075	Glu	Thr	Ala	Lys	Val 2080	Leu	Leu	Asp	His	Phe 2085	Ala	Asn	Arg
Asp	Ile 2090		Asp	His	Met	Asp 2095		Leu	Pro	Arg	Asp 2100	Ile	Ala	Gln
										_				

										-				
Glu	Arg 2105	Met	His	His	Asp	Ile 2110	Val	Arg	Leu	Leu	Asp 2115	Glu	Tyr	Asn
Leu	Val 2120	Arg	Ser	Pro	Gln	Leu 2125	His	Gly	Ala	Pro	Leu 2130	Gly	Gly	Thr
Pro	Thr 2135	Leu	Ser	Pro	Pro	Leu 2140	Cys	Ser	Pro	Asn	Gly 2145	Tyr	Leu	Gly
Ser	Leu 2150	Lys	Pro	Gly	Val	Gln 2155	Gly	Lys	Lys	Val	Arg 2160	Lys	Pro	Ser
Ser	Lys 2165		Leu	Ala	Cys	Gly 2170	Ser	Lys	Glu	Ala	Lys 2175	Asp	Leu	FÀ2
Ala	Arg 2180		Lys	Lys	Ser	Gln 2185	Asp	Gly	Lys	Gly	Cys 2190	Leu	Leu	Asp
Ser	Ser 2195		Met	Leu	Ser	Pro 2200	Val	Asp	Ser	Leu	Glu 2205	Ser	Pro	His
Gly	Tyr 2210		Ser	Asp	Val	Ala 2215	Ser	Pro	Pro	Leu	Leu 2220	Pro	Ser	Pro
	Gln 2225		Ser	Pro	Ser	Val 2230	Pro	Leu	Asn	His	Leu 2235	Pro	Gly	Met
Pro	Asp 2240		His	Leu	Gly	Ile 2245	Gly	His	Leu	Asn	Val 2250	Ala	Ala	Lys
Pro	Glu 2255		Ala	Ala	Leu	Gly 2260	Gly	Gly	Gly	Arg	Leu 2265		Phe	Glu
Thr	Gly 2270		Pro	Arg	Leu	Ser (2275	His	Leu	Pro	Val	Ala 2280	Ser	Gly	Thr
Ser	Thr 2285		Leu	Gly	Ser	Ser 2290	Ser	Gly	Gly	Ala	Leu 2295	Asn	Phe	Thr
Val	Gly 2300		Ser	Thr	Ser	Leu 2305		Gly	Gln	Сув	Glu 2310	Trp	Leu	Ser
Arg	Leu 2315		Ser	Gly	Met	Val 2320		Asn	Gln	Tyr	Asn 2325		Leu	Arg
Gly	Ser 2330		Ala	Pro	Gly	Pro 2335		Ser	Thr	Gln	Ala 2340		Ser	Leu
Gln	His 2345		Met	. Val	Gly	Pro 2350		His	Ser	Ser	Leu 2355	Ala	Ala	Ser
Ala	Leu 2360		Glr	Met	Met	Ser 2365		Gln	Gly	Leu	Pro 2370		Thr	Arg
Leu	Ala 2375		Glr	Pro	His	Leu 2380		Gln	Thr	Gln	Gln 2385		Gln	Pro
Glr	Asn 2390		Glr	Met	Gln	Gln 2395		Asn	Leu	Gln	Pro 2400		Asn	Ile
Glr	1 Gln 2409		Glr	n Ser	Lev	Gln 2410		Pro	Pro	Pro	Pro 2415		Glr	Pro
His	Leu 2420		/ Val	l Ser	Ser	Ala 2425		Ser	Gly	His	Leu 2430		Arg	Ser
Phe	Leu 243		Gly	y Glu	n Pro	Ser 2440		Ala	Asp	Va]	Gln 2445		Let	Gly

Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln Glu Ser Pro

Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro Pro Val Thr 2465 2470 2475

Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser Ser 2480 2485 2490

Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His 2495 2500 2505

Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser 2510 2515 2520

Ser Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser 2525 2530 2535

Ser Pro Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu 2540 2545 2550

Ala Phe Lys 2555

<210> 40

<211> 2471

<212> PRT

<213> Homo sapiens

<400> 40

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp 1 5 10 15

Leu Cys Cys Ala Ala Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr

Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr

Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His

Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val 65 70 75 80

Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe 85 90 95

Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser

Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr 115 120 125

Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp 130 135 140

Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr 145 150 155 160

Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly 165 170 175

Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys

Gln His Gly Gly Thr Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln 200 Cys Pro Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Gly Phe Glu Gly Ser Thr Cys Glu Arg Asn Ile Asp Asp Cys Pro Asn His Arg Cys Gln Asn Gly 265 Gly Val Cys Val Asp Gly Val Asn Thr Tyr Asn Cys Arg Cys Pro Pro Gln Trp Thr Gly Gln Phe Cys Thr Glu Asp Val Asp Glu Cys Leu Leu Gln Pro Asn Ala Cys Gln Asn Gly Gly Thr Cys Ala Asn Arg Asn Gly Gly Tyr Gly Cys Val Cys Val Asn Gly Trp Ser Gly Asp Asp Cys Ser 330 Glu Asn Ile Asp Asp Cys Ala Phe Ala Ser Cys Thr Pro Gly Ser Thr Cys Ile Asp Arg Val Ala Ser Phe Ser Cys Met Cys Pro Glu Gly Lys Ala Gly Leu Leu Cys His Leu Asp Asp Ala Cys Ile Ser Asn Pro Cys 375 His Lys Gly Ala Leu Cys Asp Thr Asn Pro Leu Asn Gly Gln Tyr Ile 395 Cys Thr Cys Pro Gln Gly Tyr Lys Gly Ala Asp Cys Thr Glu Asp Val Asp Glu Cys Ala Met Ala Asn Ser Asn Pro Cys Glu His Ala Gly Lys 425 Cys Val Asn Thr Asp Gly Ala Phe His Cys Glu Cys Leu Lys Gly Tyr 440 Ala Gly Pro Arg Cys Glu Met Asp Ile Asn Glu Cys His Ser Asp Pro 455 Cys Gln Asn Asp Ala Thr Cys Leu Asp Lys Ile Gly Gly Phe Thr Cys 475 Leu Cys Met Pro Gly Phe Lys Gly Val His Cys Glu Leu Glu Ile Asn Glu Cys Gln Ser Asn Pro Cys Val Asn Asn Gly Gln Cys Val Asp Lys Val Asn Arg Phe Gln Cys Leu Cys Pro Pro Gly Phe Thr Gly Pro Val Cys Gln Ile Asp Ile Asp Asp Cys Ser Ser Thr Pro Cys Leu Asn Gly

Ala Lys Cys Ile Asp His Pro Asn Gly Tyr Glu Cys Gln Cys Ala Thr

550

555

Gly Phe Thr Gly Val Leu Cys Glu Glu Asn Ile Asp Asn Cys Asp Pro Asp Pro Cys His His Gly Gln Cys Gln Asp Gly Ile Asp Ser Tyr Thr Cys Ile Cys Asn Pro Gly Tyr Met Gly Ala Ile Cys Ser Asp Gln Ile Asp Glu Cys Tyr Ser Ser Pro Cys Leu Asn Asp Gly Arg Cys Ile Asp Leu Val Asn Gly Tyr Gln Cys Asn Cys Gln Pro Gly Thr Ser Gly Val 625 Asn Cys Glu Ile Asn Phe Asp Asp Cys Ala Ser Asn Pro Cys Ile His Gly Ile Cys Met Asp Gly Ile Asn Arg Tyr Ser Cys Val Cys Ser Pro 665 Gly Phe Thr Gly Gln Arg Cys Asn Ile Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Arg Lys Gly Ala Thr Cys Ile Asn Gly Val Asn Gly Phe Arg Cys Ile Cys Pro Glu Gly Pro His His Pro Ser Cys Tyr Ser Gln Val Asn Glu Cys Leu Ser Asn Pro Cys Ile His Gly Asn Cys Thr Gly Gly Leu Ser Gly Tyr Lys Cys Leu Cys Asp Ala Gly Trp Val Gly Ile 745 Asn Cys Glu Val Asp Lys Asn Glu Cys Leu Ser Asn Pro Cys Gln Asn Gly Gly Thr Cys Asp Asn Leu Val Asn Gly Tyr Arg Cys Thr Cys Lys Lys Gly Phe Lys Gly Tyr Asn Cys Gln Val Asn Ile Asp Glu Cys Ala 795 Ser Asn Pro Cys Leu Asn Gln Gly Thr Cys Phe Asp Asp Ile Ser Gly Tyr Thr Cys His Cys Val Leu Pro Tyr Thr Gly Lys Asn Cys Gln Thr Val Leu Ala Pro Cys Ser Pro Asn Pro Cys Glu Asn Ala Ala Val Cys Lys Glu Ser Pro Asn Phe Glu Ser Tyr Thr Cys Leu Cys Ala Pro Gly Trp Gln Gly Gln Arg Cys Thr Ile Asp Ile Asp Glu Cys Ile Ser Lys Pro Cys Met Asn His Gly Leu Cys His Asn Thr Gln Gly Ser Tyr Met 890 Cys Glu Cys Pro Pro Gly Phe Ser Gly Met Asp Cys Glu Glu Asp Ile 905 Asp Asp Cys Leu Ala Asn Pro Cys Gln Asn Gly Gly Ser Cys Met Asp 920

- Gly Val Asn Thr Phe Ser Cys Leu Cys Leu Pro Gly Phe Thr Gly Asp 930 935 940
- Lys Cys Gln Thr Asp Met Asn Glu Cys Leu Ser Glu Pro Cys Lys Asn 945 950 955 960
- Gly Gly Thr Cys Ser Asp Tyr Val Asn Ser Tyr Thr Cys Lys Cys Gln 965 970 975
- Ala Gly Phe Asp Gly Val His Cys Glu Asn Asn Ile Asn Glu Cys Thr 980 985 990
- Glu Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser
- Phe Ser Cys Leu Cys Pro Val Gly Phe Thr Gly Ser Phe Cys Leu 1010 1015 1020
- His Glu Ile Asn Glu Cys Ser Ser His Pro Cys Leu Asn Glu Gly 1025 1030 1035
- Thr Cys Val Asp Gly Leu Gly Thr Tyr Arg Cys Ser Cys Pro Leu 1040 1045 1050
- Gly Tyr Thr Gly Lys Asn Cys Gln Thr Leu Val Asn Leu Cys Ser
- Arg Ser Pro Cys Lys Asn Lys Gly Thr Cys Val Gln Lys Lys Ala 1070 1075 1080
- Glu Ser Gln Cys Leu Cys Pro Ser Gly Trp Ala Gly Ala Tyr Cys 1085 1090 1095
- Asp Val Pro Asn Val Ser Cys Asp Ile Ala Ala Ser Arg Gly
 1100 1105 1110
- Val Leu Val Glu His Leu Cys Gln His Ser Gly Val Cys Ile Asn 1115 1120 1125
- Ala Gly Asn Thr His Tyr Cys Gln Cys Pro Leu Gly Tyr Thr Gly
 1130 1140
- Ser Tyr Cys Glu Glu Gln Leu Asp Glu Cys Ala Ser Asn Pro Cys 1145 1150 1155
- Gln His Gly Ala Thr Cys Ser Asp Phe Ile Gly Gly Tyr Arg Cys 1160 1165 1170
- Glu Cys Val Pro Gly Tyr Gln Gly Val Asn Cys Glu Tyr Glu Val 1175 1180 1185
- Asp Glu Cys Gln Asn Gln Pro Cys Gln Asn Gly Gly Thr Cys Ile 1190 1195 1200
- Asp Leu Val Asn His Phe Lys Cys Ser Cys Pro Pro Gly Thr Arg 1205 1210 1215
- Gly Leu Leu Cys Glu Glu Asn Ile Asp Asp Cys Ala Arg Gly Pro 1220 1230
- His Cys Leu Asn Gly Gly Gln Cys Met Asp Arg Ile Gly Gly Tyr 1235 1240 1245
- Ser Cys Arg Cys Leu Pro Gly Phe Ala Gly Glu Arg Cys Glu Gly 1250 1260
- Asp Ile Asn Glu Cys Leu Ser Asn Pro Cys Ser Ser Glu Gly Ser
- Leu Asp Cys Ile Gln Leu Thr Asn Asp Tyr Leu Cys Val Cys Arg

	1280					1285	P1	1073	us s	eq 1	18t.S 1290	T25.	txt	•
Ser	Ala 1295	Phe	Thr	Gly	Arg	His 1300	Cys	Glu	Thr	Phe	Val 1305	Asp	Val	Cys
Pro	Gln 1310	Met	Pro	Cys	Leu	Asn 1315	Gly	Gly	Thr	Cys	Ala 1320	Val	Ala	Ser
Asn	Met 1325	Pro	Asp	Gly	Phe	Ile 1330	Сув	Arg	Сув	Pro	Pro 1335	Gly	Phe [.]	Ser
Gly	Ala 1340	Arg	Сув	Gln	Ser	Ser 1345	Cys	Gly	Gln	Val	Lys 1350	Cys	Arg	Lys
Gly	Glu 1355	Gln	Cys	Val	His	Thr 1360	Ala	Ser	Gly	Pro	Arg 1365	Cys	Phe	Cys
	Ser 1370					Glu 1375					1380			
Gln	His 1385	Gly	Gly	Ser	Cys	His 1390	Pro	Gln	Arg	Gln	Pro 1395	Pro	Tyr	Tyr
Ser	Cys 1400	Gln	Cys	Ala	Pro	Pro 1405	Phe	Ser	Gly	Ser	Arg 1410	Cys	Glu	Leu
Tyr	Thr 1415	Ala	Pro	Pro	Ser	Thr 1420	Pro	Pro	Ala	Thr	Cys 1425	Leu	Ser	Gln
Tyr	Cys 1430		Asp	Lys	Ala	Arg 1435	Asp	Gly	Val	Сув	Asp 1440	Glu	Ala	Cys
Asn	Ser 1445	His	Ala	Cys	Gln	Trp 1450	Asp	Gly	Gly	Asp	Cys 1455	Ser	Leu	Thr
Met	Glu 1460	Asn	Pro	Trp	Ala	Asn 1465		Ser	Ser	Pro	Leu 1470	Pro	Cys	Trp
Asp	Tyr 1475	Ile	Asn	Asn	Gln	Cys 1480	Asp	Glu	Leu	Сув	Asn 1485	Thr	Val	Glu
Сув	Leu 1490		Asp	Asn	Phe	Glu 1495		Gln	Gly	Asn	Ser 1500		Thr	Cys
ГÀв	Tyr 1505	-	Lys	Tyr	Сув	Ala 1510		His	Phe	Lys	Asp 1515	Asn	His	Суз
	1520	_	-			Glu 1525		-		_	1530			_
Cys	Ala 1535					Glu 1540					1545			
	Val 1550					Pro 1555					1560			_
Ser	Phe 1565		Arg	Ala	Leu	Gly 1570		Leu	Leu	His	Thr 1575		Leu	Arg
Ile	Lys 1580		Asp	Ser	Gln	Gly 1585		Leu	Met	Val	Туг 1590		Tyr	Tyr
Gly	Glu 1595	-	Ser	Ala	Ala	Met 1600	-	Lys	Gln	Arg	Met 1605		Arg	Arg
Ser	Leu 1610		Gly	Glu	Gln	Glu 1615		Glu	Val	Ala	Gly 1620		Lys	Val
Phe	Leu 1625		Ile	Asp	Asn	Arg 1630		Суз	Val	Gln	Asp 1635		Asp	His

Cys	Phe 1640	Lys	Asn '	Thr .	Asp	Ala 1645	Ala	Ala	Ala	Leu :	Leu 1650	Ala	Ser :	His
Àla	Ile 1655	Gln	Gly	Thr	Leu	Ser 1660	Tyr	Pro	Leu	Val	Ser 1665	۷al ٔ	Val	Ser
Glu	Ser 1670	Leu	Thr	Pro	Glu	Arg 1675	Thr	Gln	Leu	Leu	Tyr 1680	Leu	Leu	Ala
Val	Ala 1685	Val	Val	Ile	Ile	Leu 1690	Phe	Ile	Ile	Leu	Leu 1695	Gly	Val	Ile
Met	Ala 1700		Arg	Lys	Arg	Lys 1705	His	Gly	Ser	Leu	Trp 1710	Leu	Pro	Glu
Gly	Phe 1715		Leu	Arg	Arg	Asp 1720	Ala	Ser	Asn	His	Lys 1725	Arg	Arg	Glu
Pro	Val 1730	_	Gln	Asp	Ala	Val 1735	Gly	Leu	Lys	Asn	Leu 1740	Ser	Val	Gln
Val	Ser 1745		Ala	Asn	Leu	Ile 1750	Gly	Thr	Gly	Thr	Ser 1755	Glu	His	Trp
	1760					Gln 1765					1770			
	1775					Glu 1780					1785			
	1790)				Glu 1795					1800			
	1805	5				Pro 1810	1				1815			
	1820)				Gly 1825	i				1830	,		
Lev	Ala 1835	5				Gly 1840)				1845	•		
	1850	0				Ser 1855	5				1860)		
_	186	5				1870)				1875	Ď		Glu
	188	0				188	5				1830	J		a Ala
_	189	5				190	0				190	5		Asn
	191	0				191	5				192	U		a Gln
	192	5				193	0				193	5		u Asp
	194	.0				194	5				195	U		a Arg
	195	55				196	0				196	5		n Ala
As	p Val		n Al	a Va	l As	p Asp 197	Hi 5	s Gl	у Гу	s Se	r Ala 198	Le [.]	u Hi	s · Trp

730	λla	Δla	٧a٦	Asn	Asn	Val	Glu	Ala	Thr	Leu	Leu	Leu	Leu	Lys
ALG	TTU	1114									1995			
	1985					1990					エフフコ			

- Asn Gly Ala Asn Arg Asp Met Gln Asp Asn Lys Glu Glu Thr Pro
- Leu Phe Leu Ala Ala Arg Glu Gly Ser Tyr Glu Ala Ala Lys Ile
- Leu Leu Asp His Phe Ala Asn Arg Asp Ile Thr Asp His Met Asp 2030 2035 2040
- Arg Leu Pro Arg Asp Val Ala Arg Asp Arg Met His His Asp Ile 2045 2050
- Val Arg Leu Leu Asp Glu Tyr Asn Val Thr Pro Ser Pro Pro Gly 2060 2065 2070
- Thr Val Leu Thr Ser Ala Leu Ser Pro Val Ile Cys Gly Pro Asn 2075 2080 2085
- Arg Ser Phe Leu Ser Leu Lys His Thr Pro Met Gly Lys Lys Ser 2090 2095 2100
- Arg Arg Pro Ser Ala Lys Ser Thr Met Pro Thr Ser Leu Pro Asn 2105 2110 2115
- Leu Ala Lys Glu Ala Lys Asp Ala Lys Gly Ser Arg Arg Lys Lys 2120 2125 2130
- Ser Leu Ser Glu Lys Val Gln Leu Ser Glu Ser Ser Val Thr Leu 2135 2140 2145
- Ser Pro Val Asp Ser Leu Glu Ser Pro His Thr Tyr Val Ser Asp
- Thr Thr Ser Ser Pro Met Ile Thr Ser Pro Gly Ile Leu Gln Ala 2165 2170 2175
- Ser Pro Asn Pro Met Leu Ala Thr Ala Ala Pro Pro Ala Pro Val 2180 2185 2190
- His Ala Gln His Ala Leu Ser Phe Ser Asn Leu His Glu Met Gln 2195 2200 2205
- Pro Leu Ala His Gly Ala Ser Thr Val Leu Pro Ser Val Ser Gln 2210 2215
- Leu Leu Ser His His His Ile Val Ser Pro Gly Ser Gly Ser Ala 2225 2230 2235
- Gly Ser Leu Ser Arg Leu His Pro Val Pro Val Pro Ala Asp Trp 2240 2245 2250
- Met Asn Arg Met Glu Val Asn Glu Thr Gln Tyr Asn Glu Met Phe 2255 2260 2265
- Gly Met Val Leu Ala Pro Ala Glu Gly Thr His Pro Gly Ile Ala 2270 2275 2280
- Pro Gln Ser Arg Pro Pro Glu Gly Lys His Ile Thr Thr Pro Arg 2285 2290 2295
- Glu Pro Leu Pro Pro Ile Val Thr Phe Gln Leu Ile Pro Lys Gly 2300 2305 2310
- Ser Ile Ala Gln Pro Ala Gly Ala Pro Gln Pro Gln Ser Thr Cys 2315 2320 2325
- Pro Pro Ala Val Ala Gly Pro Leu Pro Thr Met Tyr Gln Ile Pro

	2330					2335				•	2340			
Glu	Met 2345	Ala	Arg	Leu	Pro	Ser 2350	Val	Ala	Phe	Pro	Thr 2355	Ala	Met	Met
Pro	Gln 2360	Gln	Asp	Gly	Gln	Val 2365	Ala	Gln	Thr	Ile	Leu 2370	Pro	Ala	Tyr
His	Pro 2375	Phe	Pro	Ala	Ser	Val 2380	Gly	Lys	Tyr	Pro	Thr 2385	Pro	Pro	Ser
Gln	His 2390	Ser	Tyr	Ala	Ser	Ser 2395	Asn	Ala	Ala	Glu	Arg 2400	Thr	Pro	Ser
His	Ser 2405	Gly	His	Leu	Gln	Gly 2410		His	Pro	Tyr	Leu 2415	Thr	Pro	Ser
Pro	Glu 2420	Ser	Pro	Asp	Gln	Trp 2425	Ser	Ser	Ser	Ser	Pro 2430	His	Ser	Ala
Ser	Asp 2435		Ser	Asp	Val	Thr 2440	Thr	Ser	Pro	Thr	Pro 2445	Gly	Gly	Ala
Gly	Gly 2450		Gln	Arg	Gly	Pro 2455	Gly	Thr	His	Met	Ser 2460		Pro	Pro
His	Asn 2465		Met	Gln	Val	Tyr 2470	Ala							